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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,521	03/29/2004	Richard Jones	42P18312	1937

7590 03/16/2006  
James Y. Go  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
Seventh Floor  
12400 Wilshire Boulevard  
Los Angeles, CA 90025

EXAMINER
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KIANNI, KAVEH C

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5/2

<b>Office Action Summary</b>	<b>Application No.</b> 10/811,521	<b>Applicant(s)</b> JONES, RICHARD	
	<b>Examiner</b> Kianni C. Kaveh	<b>Art Unit</b> 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006 and 08 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 12-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 8 is/are rejected.
- 7) ☒ Claim(s) 1-3, 5-7, 9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

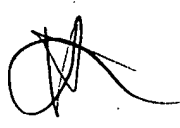
#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_



### **DETAILED ACTION**

*Applicant's election of Group I claims 1-11 and 18-26, without traverse--however, without choosing of species between Group IA and Group IB-- in the paper submitted on 1/03/06 is acknowledged. The examiner called Mr. Go on 3/08/06 to seek applicant's choice between the Group inventions species, and Mr. Go replied to such election by choosing Group IA, claims 1-11 without traverse. The requirement is still deemed proper and is therefore made FINAL.*

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation 'the first optical path' in 3<sup>rd</sup> line. There is insufficient antecedent basis for this limitation in the claim. Correction is required

### **Allowable Subject Matter**

Claims 4 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the optical beam output from the output of

Art Unit: 2883

the evanescent coupler has output spectrum that is similar to an intra-cavity spectrum of the optical beam directed through the laser cavity in combination with the rest of the limitations of the base claim.

Claims 8 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a photonic device monolithically integrated in the semiconductor substrate and optically coupled to receive the optical beam from the second optical waveguide in combination with the rest of the limitations of the base claim.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2883

Claims 1-3, 5-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levner et al. (US 20030007733).

Regarding claim 1, Levner teaches an apparatus (shown in at least fig. 4), comprising: first and second optical paths 171,172, an optical beam to be directed through the first optical path 171; an evanescent coupler 172 including the first and second optical paths 171,173, the evanescent coupler 172 evanescently coupling the first and second optical paths 171,172; and a first reflector included in the evanescent coupler and integrated in the first and second optical paths such that the optical beam directed through the first optical path is reflected from the first reflector as the optical beam is evanescently coupled from the first to the second optical path (shown in at least fig. 4, item grating reflector integrated in the evanescent coupler 172 (see at least parag.)).

However, does not specifically state wherein the above evanescent coupling is carried out 'concurrently'. It is obvious/well-known to those of ordinary skill in the art when the invention was made that coupling light in between waveguide gratings evanescently is/known-as concurrent coupling since such coupling generate a reflectance spectrum in at least one spectral band (see 0026).

Regarding claims 2-3, 5-7 and 9-10, Levner further teaches wherein the first reflector is defined at a plane of symmetry in a center of the evanescent coupler (fig. 4, item symmetric reflector), wherein the first reflector is at a first end of the first optical path, the apparatus further comprising: a second reflector at a second end of the

Art Unit: 2883

optical path; and a laser cavity including a gain medium defined between first and second reflectors (see fig. 4, items reflectors at the ends of 173 defining laser cavity gain medium in between reflectors, see parag. 0008 in which the disadvantages are solved by Levner, see parag. 0025, 0047 and 0053); wherein the first and second optical paths, gain medium and the first reflector are disposed in semiconductor material (see 0014, 0021, in which the disadvantages are solved by Levner, see parag. 0025 and 0108); a first optical waveguide disposed in the semiconductor material and the second optical path is included in a second optical waveguide disposed in the semiconductor material (see at least partag. 0107 and 0112); wherein the first and second optical paths include optical fibers (see 0095); wherein the semiconductor material comprises silicon (see 0095; wherein optical fibers/waveguides are conventionally/inherently made from silicon and/or  $\text{SiO}_2$ ); wherein the first reflector comprises a Bragg grating included in the evanescent coupler and integrated in the first and second optical paths (see at least 0063).

### ***Citation of Relevant Prior Art***

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

US 20050286602 A1    Gunn, Deana et al.

US 20040208579 A1    Bendett, Mark P. et al.

US 6813405    Bendett et al.

US 20020126942 A1    Evans, Gary A.  
US 6522794 B1        Bischel; William K. et al.  
US 5513196 A        Bischel; William K. et al.

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306 (for formal communications intended for entry)

**or:**

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

March 13, 2006

  
**KAVEH KIANNI**  
**PRIMARY EXAMINER**

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